

Name: \_\_\_\_\_


Date: \_\_\_\_\_

Class: \_\_\_\_\_

**CANDY CRAZE**

According to the National Candy Buyers Brands Survey, what candy bar has remained the nation's favorite for many years?

Match each equation to its graph. Write by each exercise number the letter representing the solution. Read down the column of letters to identify the answer to the survey stumper.

 **Tip:** In a coordinate plane,  $x = a$  graphs as a vertical line in which the  $x$ -coordinate is always  $a$ ; similarly,  $y = b$  graphs as a horizontal line in which the  $y$ -coordinate is always  $b$ . For example,  $x = 3$  is a vertical line that runs through  $x$ -coordinate 3 and includes points such as  $(3, 1)$ ,  $(3, -2)$ , and  $(3, 7)$ .

S 1.  $x = -3$

N 2.  $x = 5$

I 3.  $y = -4$

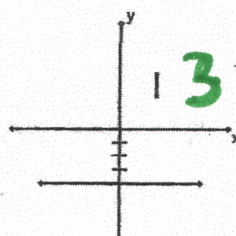
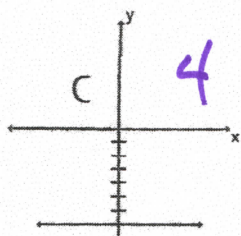
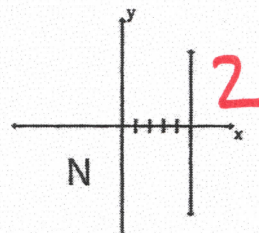
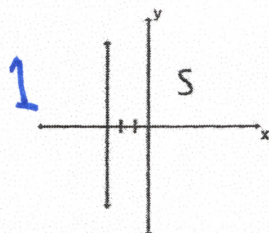
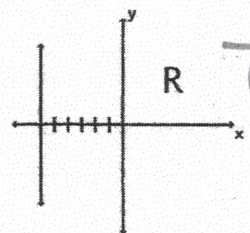
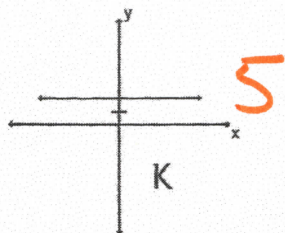
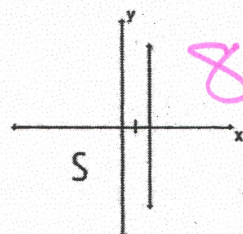
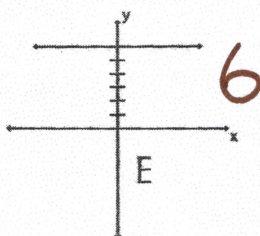
C 4.  $y = -7$

K 5.  $y = 2$

E 6.  $y = 6$

R 7.  $x = -6$

S 8.  $x = 2$





# X and Y Intercepts

## I. Find the x and y intercepts.

$$2x + y = 3$$

To find x-intercept, let  $y = 0$ . To find y-intercept, let  $x = 0$ .

$$2x + 0 = 3$$

$$2x = 3$$

$$x = \frac{3}{2} \left( \frac{3}{2}, 0 \right)$$

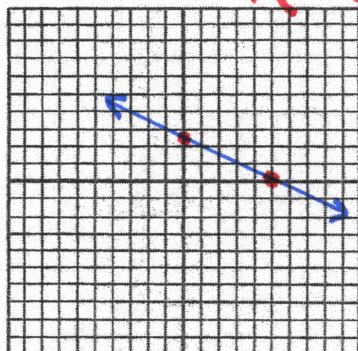
$$2 \cdot 0 + y = 3$$

$$y = 3 \ (0, 3)$$

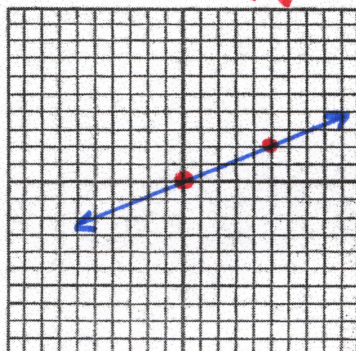
1.  $3x + 4y = 12$   $x = 4 \ (4, 0)$   
 $y = 3 \ (0, 3)$
2.  $4x + y = 2$   $x = \frac{1}{2} \ (\frac{1}{2}, 0)$   
 $y = 2 \ (0, 2)$
3.  $5x - 4y = 15$   $x = 3 \ (3, 0)$   
 $y = -\frac{15}{4} \ (0, -\frac{15}{4})$
4.  $2x - 2y = -4$   $x = -2 \ (-2, 0)$   
 $y = 2 \ (0, 2)$
5.  $3x + y = -9$   $x = -3 \ (-3, 0)$   
 $y = -9 \ (0, -9)$
6.  $4x - 2y - 8 = 0$   $4x - 2y = 8$   $x = 2 \ (2, 0)$   
 $y = -4 \ (0, -4)$

## II. Find the x and y intercepts. Then graph.

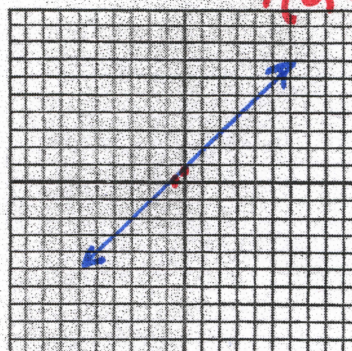
7.  $x + 2y = 5$   $x(5, 0)$   
 $y(0, \frac{5}{2})$



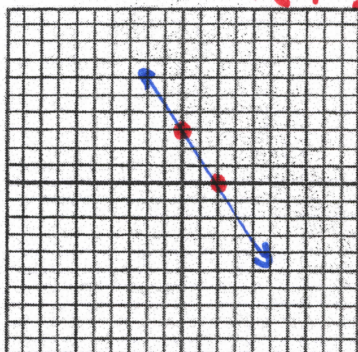
8.  $2x - 5y = 0$   $x(0, 0)$   
 $y(0, 0)$



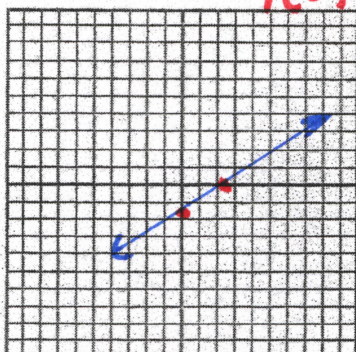
9.  $4x - 3y = -2$   $x(\frac{1}{4}, 0)$   
 $y(0, \frac{2}{3})$



10.  $3x + 2y = 6$   $x(2, 0)$   
 $y(0, 3)$



11.  $5x - 7y = 12$   $x(\frac{12}{5}, 0)$   
 $y(0, -\frac{12}{7})$



12.  $8x + 10y = 50$   $x(6\frac{1}{4}, 0)$   
 $y(0, 5)$

